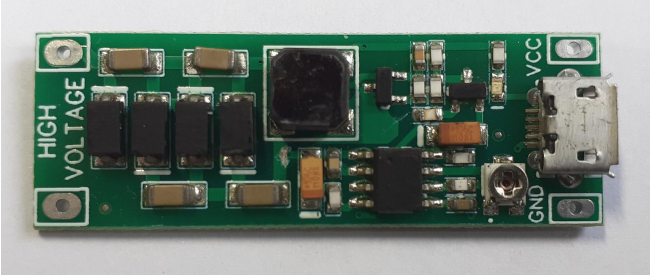
The DCDC_3V3_400V_V1 - High Voltage Module for Geiger Tube



Description

New release of the high voltage module as well as the previous version is a miniature ultra-thin (5 mm) and low-power DCDC_3V3_400V_V1 module with the ability to generate high voltage at low input voltage and consumption. This product is made by IoT-devices with freedom & wisdom in Ukraine.

Application of the DCDC_3V3_400V_V1 module

The module was designed for use as a high voltage source for Geiger-Muller tubes but the technical characteristics of the module make it possible to use in other kinds of projects.
Here are just a few recipes:

- Power supply of retro symbol gas-filled indicators;
- Devices for protection against mosquitoes, ozonizers, etc.

What's improved in the new version?

The new version of the DCDC_3V3_400V_V1 module has improved stability of the output high voltage level depending on
the input supply voltage level in the range from 2.4 volts to 5.5 volts.

Important instructions

The module is sold with a preset output voltage level 400 volts and is ready for use.

Connect the power supply via the µUSB connector or two VCC & GND inputs.
Connect the high voltage load to the High voltage and GND outlets.

In case the user needs to change the output voltage level, it is necessary to:

Step 1. Connect load to the output High voltage port (for example, a resistor of 10 MOhm and in parallel to the resistor a capacitor of 300 nF, 600 V).

Step 2. Use a high impedance multimeter (10 MOhm) to control the high voltage level.

Step 3. Connect Power Supply source to input port (2,5 - 5,5 volts recommended).

Step 4. Use the potentiometer on board and set the output voltage level as you need.

Warning! Keep out other electronic or electrical circuits to the high voltage connectors of the module because this may damage these devices.

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DCDC_3V3_400V vs DCDC_3V3_400V_V1

Parameter	DCDC_3V3_400V	DCDC_3V3_400V_V1	Status
Power supply voltage	3.7 or 5.0 V	2.2 - 5.5 V	improved
Output voltage range	adjustable: 200-1200 V	adjustable: 200-1200 V	no change
Dependence on the supply voltage level	yes	no	improved
Recommended load resistance	1-10M ohms	1-10M ohms	no change
Recommended load capacitor	300 nF	300 nF	no change
Current consumption	near 30 mA	near 30 mA	no change
Output voltage stability	5%	3%	improved
Module dimensions	X: 45 mm Y: 15.5 mm Z: 5mm	X: 45 mm Y: 15.5 mm Z: 5mm	no change

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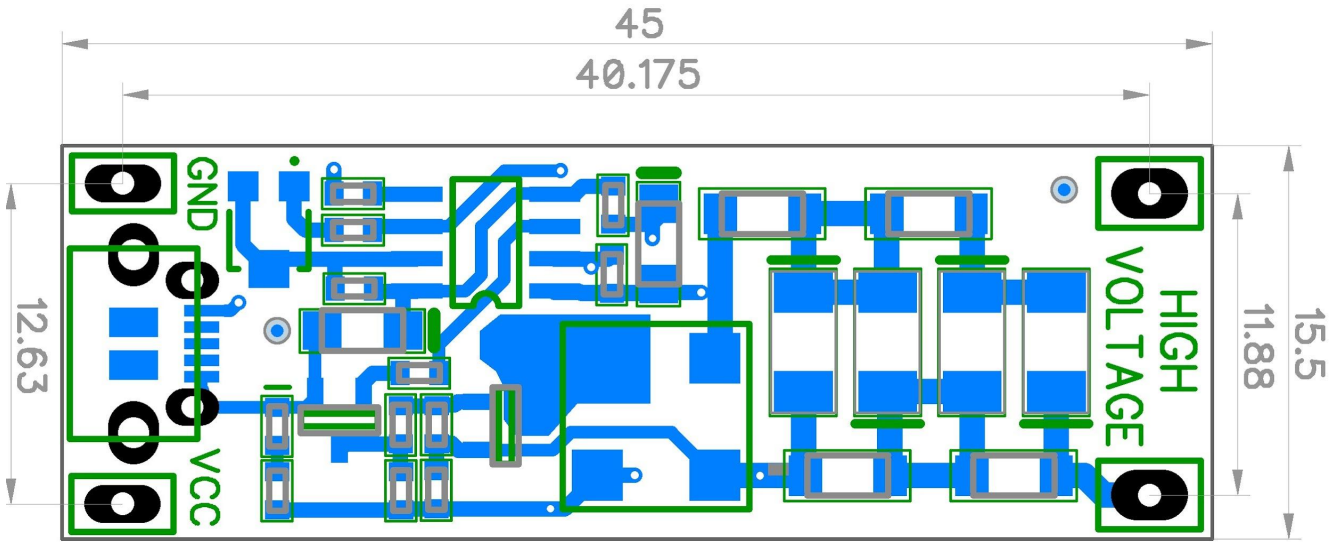
Technical specifications

Specifications	Minimum	Typical	Maximum
Input voltage level	2.4 Volts	5 Volts	5.5 Volts
Output voltage adjustment range	200 Volts	400 Volts	1200 Volts
Consumed current	10 mA	18 mA	20 mA
Load resistance	10 MOhm	10 MOhm	10 MOhm
Output voltage stability at 2.4 - 5.5V input	±3%	±3%	±3%
Recommended load capacitor	300 nF 400V	300 nF 600 V	300 nF 1500 V

Dimensions



The DCDC_3V3_400V_V1 module has the following dimensions:
X: 45 mm
Y: 15.5 mm
Z: 5 mm

Product sets

The module is supplied in the following sets:

- The DCDC_3V3_400V_V1 High Voltage Module - 1 pc.

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References

Manufacturer site	https://iot-devices.com.ua
Shop on Tindie for international orders	https://www.tindie.com/stores/iotdev/
Shop for local orders within Ukraine	https://iot-devices.com.ua/shop/
Facebook page	https://www.facebook.com/IoT-devices-114746816966582
Twitter	https://twitter.com/iotdevicescomua
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Email	info@iot-devices.com.ua

Manufacturer message

Dear Reader! Thank you for your interest in our products. We hope that you enjoy this device.
IoT-devices was born thanks to the support of our customers and thanks to our experience and love for Electronics.